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RESEARCH ON THE EXPERIMENTAL TOWNSHIP PROGRAM
IN MICHIGAN

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What the Program Is

The Michigan Township Program is an intensive extension program which is being conducted on an experimental basis in five townships over a five year period.

The broad objective of the experiment is to find out whether or not an intensive extension approach operating in a small political subdivision is sufficiently productive to justify the additional cost. Other objectives were stated in terms of:

1. Increasing agricultural output.
2. Increasing farm family incomes.
3. Improving the standard of living of farm families.
4. Speeding up the rate of adoption of scientific farm practices.

The townships were selected and the township agents hired and started on the job between July 1953 and January 1954. The townships were chosen to obtain geographical distribution and to obtain representation of the various types of farming in Michigan. The fact that the farm people had had little contact with extension was an important criterion in the selection of two of the townships. The number of farmers involved in each of the township experimental areas varies from 50 to 200. This compares with from 400 to 800 farms per county in the northern part of the lower peninsula of Michigan, and from 2,000 to 4,500 in southern Michigan where most of our agriculture is located.

The five township agents had all had previous experience as county agricultural agents. They all have a township extension advisory board made up of five or seven farmer members elected by the farmers in their township. These farmer boards have (1) helped the township agents get acquainted with the local people and agriculture, (2) arranged for local financing, (3) formed committees to promote various phases of the township program, and (4) advised the township agent as to which activities would be most helpful to the local people. In the extension administrative setup, the township agents are administered by a project coordinator (who is now an assistant director of extension) with the help of the district supervisors. Since July 1954, a farm management extension specialist has been assigned part-time to assist the township agents with program and subject matter. The experiment is financed in part by a grant from the Kellogg Foundation.

While the agents conduct some group work sessions and make some use of the mass media, the experiment consists primarily of an individual on-the-farm approach.

The Research

When the program was set up, provisions were made for a half-time position for program analysis to evaluate the effectiveness of the program. This job was assigned to me, and arrangements were made to bring in a graduate assistant each year to help with the research. In setting up the research, I have had help from a number of sources, of which I would like to mention:

1. Our rural sociologists at Michigan State College.
2. J. L. Matthews, Division of Extension Research and Training.
3. J. P. Leagan's concept of the Educational Objectives of the Extension Service.

I took as my assignment the measurement of the degree to which the objectives of the program were met during the five-year experimental period. We set down all of the categories of changes which might fall within the broad objectives of the program. The categories outlined were as follows:

1. Financial progress of the farm families in the townships.
2. Changes in economic efficiency on the farms in the townships.
3. Changes in level of living of the farm families.
4. Changes in family objectives.
5. Changes in attitudes of the farm people--such as their attitudes toward Extension, toward the use of credit, toward risk and security.
6. Changes in volume of production.
7. Changes in organization of the farm business.
8. Changes in farm practices.
9. Changes in participation in Extension and other formal and informal organizations and activities.
10. Changes in farmers' levels of knowledge.
11. Changes in ability to apply knowledge to the solution of practical farm problems or managerial ability.
12. Changes in community welfare.

We further classified the types of changes under the headings of "what" and "why". That is, those which would explain what had happened because of the township program, and secondly, those which would explain why the changes had been made. An example of the first type would be that deflated net farm income had increased, say, 25%. An example of "why" might be that family objectives had changed, which raises the whole subject of motivation. On another level, an explanation of "why" might be that the farmer used more credit, or followed a soil-building program.

Our first step in the research was to establish benchmarks which would show where the farmers were at the beginning of the experiment. A sample of farmers was surveyed in each area to obtain information which permitted us to establish benchmarks for measuring changes in:

1. Volume of production.
2. Efficiency in production.
3. Farm organization.
4. Net earnings.
5. Net worth.

The samples were made up of approximately 40 farmers in each of the five townships, or a total of about 200. Since there were certain important economic relationships which we wanted to study, we decided that it was necessary to make our sample homogeneous by farm types within the township areas. We surveyed these farms by personal interview as their situations were in 1953. Our survey form included all of the information that is commonly obtained in farm account projects, all of the information needed for Cobb-Douglas analysis, plus a net worth statement. We normalized crop yields by getting averages for the preceding three years. We obtained nonfarm income so as to have a complete picture of the resources available to carry out a farm and home development program.

A study of farm practices was made by Jack Bittner, one of the graduate assistants who has worked with me on the program. His sample included every farmer in the experimental townships. His survey was made through a mail questionnaire which included 101 farm practices, including farm management and marketing practices.

The above surveys will give us benchmark data to tell us where the farmers were at the beginning of the program. By making similar surveys at the end of the five-year experimental period, we feel confident that we can say what has happened on the experimental farms during the five years. To get a measurement of how much of the change, if any, should be attributed to the township program, we have set up control groups to provide a basis of comparison. We selected the control areas from which the control farmers were chosen by matching the control area with the experimental area on the basis of:

1. Markets.
2. Soil associations.
3. Types of farming.
4. Ethnic backgrounds of the farm people.
5. County Extension programs.
 - a. History of cooperation with Extension in the areas.
 - b. Current Extension programs.
 - c. Distance from the county extension office.
 - d. Availability of meeting places.
6. Proximity to large cities.

After selecting the control areas, we proceeded to select the control farmers. We did this by getting fairly detailed information on from 80 to 125 farmers in each control area. From this group, we selected about 40 to include in our survey, using a pairing procedure which was suggested to us by studying the report of Dr. Tremblay's study of the farm planning endeavor in Vermont. We paired the experimental and the control farmers as closely as possible on the basis of age of the farm operator, labor force, total acres, tillable acres, number of cows (where relevant), and amount of machinery.

Our extension administrators have agreed that the agents assigned to our state-wide farm and home development program will work in neither the experimental nor the control areas during the duration of the five-year experiment.

In addition to the two types of surveys just mentioned, we have other plans for evaluating the program. The township agents' monthly and annual reports will serve as a useful tool in the evaluation process. Each of the township agents keeps a file on each farmer he works with in the township which will give us valuable information. From information obtained in our surveys and provided by the township agent, we will be in position to make case-study reports.

We are developing plans to study changes in farmers' participation in Extension activities and in formal and informal organizations during the experimental period.

The Soil Science Department, in cooperation with the Soil Conservation Service, obtained a record of land use on each farm in the five experimental areas during 1953 and 1954. We intend to analyze this information and to follow through to discover shifts in land use, if any, during the five-year period and to study the economic and other implications. Also, representatives of the National Agricultural Communications Project, which is located at East Lansing, assisted the Soil Science Department in preparing a soil survey report in popularized form for one of the experimental townships. They are going to study the effectiveness from a communications standpoint of this type of a report.

From our research, measures will be available at the end of the experiment to show the benefit which has been derived from the program. We have also gathered data on the costs of operating the program during the first two years. These costs include the costs of maintaining the agents in the townships, value of the administrators' time in supervising the program, and value of extension specialists' time and maintenance devoted to assisting the township agents. The cost data will be kept current so that the total costs will be available at the end of the experiment and can be compared with the benefits.



